

Remarks/Arguments

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Claim Rejections - 35 USC 103**Examiner:**

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis, Patent No. 5,841,424, in view of Lemke et al., Patent Number 6,694,428.

Lemke et al. also teach a power control function such that when a peripheral device requires less than a predetermined amount of electrical power, a peripheral circuit allows a connected PDA to provide power to the peripheral device, and when the peripheral device requires at least the predetermined amount of electrical power, the peripheral circuit does not allow the connected PDA to provide power to the peripheral device (Col.2, lines 20-60).

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Response:

In an effort to place the present application in condition for allowance as required, claims 1-11 have been cancelled without disclaimer of any kind concerning their respective merits. Additionally, the Applicant intends to distinctly point out the differences between the cited references and claims 12-14, which currently remain in the application.

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Referring to Fig.7, the 7th paragraph of the "Detailed Description of the Preferred Embodiment" section of the present application describes an embodiment of the present

application as follows:

5 When the peripheral module 350 is connected to the
PDA 310, but does not connect to the cradle 330, the
peripheral circuit controls the power transmission
between the input/output port and the upper socket 352
(which is electrically connected to the PDA 310). If
the input/output port is connected to a
low-power-consumer device, such as the keyboard, the
10 peripheral circuit allows the PDA 310 to provide electric
power to the peripheral device. Conversely, if the
input/output port of the peripheral module is connected
to a high-power-consumer device, the peripheral circuit
does not allow the PDA 310 to provide electric power
15 to the peripheral device, so as to prevent a decrease
in usable time of the PDA 310.

In short, the peripheral circuit of the peripheral
module can control power transmission between the PDA and
20 the peripheral device. When a peripheral device (such as
a keyboard or a display screen) is connected to the
input/output of the peripheral module, power transmission
from the PDA to the peripheral device occurs or does not
occur according to the amount of electrical power required
25 for operation of the peripheral device. If the peripheral
device requires less than a predetermined amount of
electrical power, the peripheral circuit allows a connected
PDA to provide power to the peripheral device. If the
peripheral device requires at least the predetermined
30 amount of electrical power, the peripheral circuit does
not allow the connected PDA to provide power to the peripheral
device. Independent claim 12 includes this limitation.

Lemke et al. discloses a system for identifying a peripheral device by sending an inquiry thereto after receiving an interrupt notification message (Title).

5 The passage (Col.2, lines 20-60) of Lemke et al. cited by the Examiner discusses possible ways to manage a communications port and identify peripheral devices, including requiring a user to open/close communication ports. In some cases, the PDA automatically can open or
10 close the communication port. The passage continues by stating, "Furthermore, requiring a user to manually close the communications port also affects power consumption. Battery powered systems, such as PDAs and other hand-held devices, are sensitive to applications that drain excessive
15 power. Thus, PDAs mostly leave their communications ports in a low power standby mode, because an open communications channel may consume significant power." (Col.2, lines 45-52).

20 The Applicant is unable to understand exactly what the Examiner is referring to when stating that Lemke et al. anticipates the power control function limitation of claim 12. If the Examiner is referring to a PDA automatically opening and/or closing the communications port to control
25 power transmission from the PDA to a peripheral device (such as a keyboard or display screen), it is agreed that Lemke teaches that open communication ports may drain excessive power from the PDA and it is advisable to close them when they are not needed. Because of the power drain problem,
30 this may necessitate the opening/closing of a PDA's communications port, or in leaving the communications port in a low power standby mode. As a result, the major purpose

of the disclosure of Lemke et al. is to simplify procedures for identifying an attached peripheral device. Lemke may suggest closing the communications port to save power. However, when the communications port is open, power is provided from the PDA to the peripheral device regardless of whether the power requirements of the peripheral device are high or low. When the communications port is closed, power is not provided from the PDA to the peripheral device.

Nevertheless, the Applicant is unable to find in Lemke any teachings or suggestions of providing power to a peripheral device only when the power requirements of the peripheral device are less than a predetermined amount. This prevents excessive power drain from the PDA if a user inadvertently or unknowingly attaches a peripheral device having a high power requirement.

For example, suppose a user attaches to the PDA a display screen as a peripheral device. Let it be assumed that the power requirements of the display screen are above the predetermined amount of electrical power and would quickly drain the battery of the PDA.

If the display screen was attached to the PDA of Lemke, all of the power in the PDA would quickly be exhausted requiring a recharge or change of battery, perhaps at a most inopportune moment.

On the other hand, if the same display screen was attached to the input/output port of the current application, the present invention's power control function would prevent the display screen from receiving electrical power

from the PDA. True, as a result, the display screen would not function unless another power supply was enlisted. Perhaps more importantly however, the host system - the PDA, would continue to operate normally without requiring a recharge or change of battery.

Therefore, the Applicant believes that the present invention does represent a new useful device not taught or suggested in the prior art. It provides a safeguard preventing a user from inadvertently or unknowingly attaching a peripheral device having a power requirement high enough to quickly drain the PDA's battery. As a result, the Applicant respectfully requests reconsideration and swift allowance of the present application as amended.

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